

## An Overview of the Science Results From TOPEX/ POSEIDON Mission

L.-L. Fu (Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA 91 109; Tel: 818-354-8167; e-mail: llf@atlantic.jpl.nasa.gov)

TOPEX/POSEIDON is the first satellite altimetry mission specifically **designed** and conducted to measure the sea surface height for the study of large-scale ocean circulation. The status of the mission operation and data products will be reported. Analyses of the first year's observations have indicated that the measurement **accuracy** is better than 5 cm for detecting sea level changes at scales from 10 km to the **size** of the ocean basins. The observations with this unprecedented accuracy have revealed the full spectrum of **sea** level variabilities that have previously **been** contaminated at large scales by orbit errors and various other errors in altimeter measurements. Prominent seasonal and **intraseasonal** variabilities are observed. Examples of these variabilities and comparisons with other types of observations and numerical ocean models will be **presented**. Progress made by the mission's science **teams** in analyzing the observations for a new understanding of large-scale ocean dynamics will be reviewed briefly. Various issues in the use of the data for ocean circulation studies will be **addressed** such as the ocean tides and the ocean's response to atmospheric pressure forcing.

1. 1994 Ocean Sciences Meeting
2. 001239391 (AGU Member)
3. (a) Dr. L.-L. Fu  
M. S. 300-323  
Jet Propulsion Laboratory  
4800 Oak Grove Drive  
Pasadena, CA 91109  
(b) Tel: 818-354-8167  
(c) Fax: 818-393-6720
4. 0
5. (a) TOPEX/POSEIDON  
(b) 4512 Currents  
4556 Sea level variations  
4532 General circulation
6. No
7. 30% 1993 Fall AGU
8. \$50 check enclosed
9. I (by session chair, M. Lefebvre)
10. No
11. No